A Case of Recycling Gone Wrong: Sudden Arm Pain

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CASE DESCRIPTION

- **Who:** 47-year-old right-handed male
- **Chief complaint:** Severe left upper arm pain
- **Event**: Patient heard a loud tearing sound from his left arm after lifting a 50 to 60-pound recycling bin two weeks prior.
- **Quality/severity:** Constant pain with moderate to severe intensity, 5-7/10. The pain radiates down to his elbow. He had bruising, which is now resolved.
- **Aggravating factors:** Activity and lifting
- **Alleviating factors:** Norco and ibuprofen with some pain relief, and an elbow sling for comfort.
- **Associated factors:** Weakness

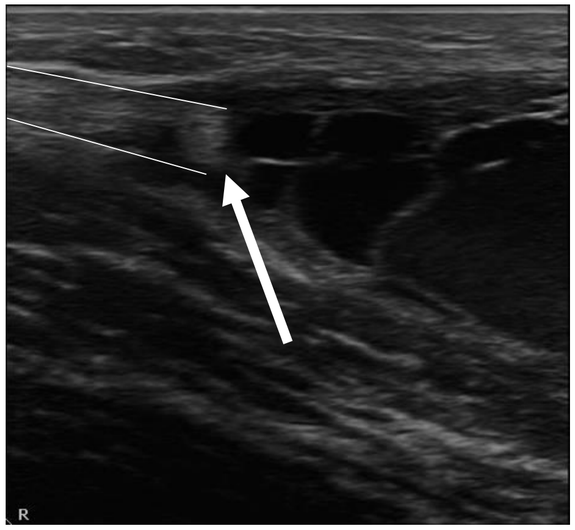
PHYSICAL EXAM

Vitals: BP 139/86 | Pulse 78 | Temp 97.3 °F| RR 16 | Ht 5‘ 11" | Wt 199 lb | SpO2 99% |

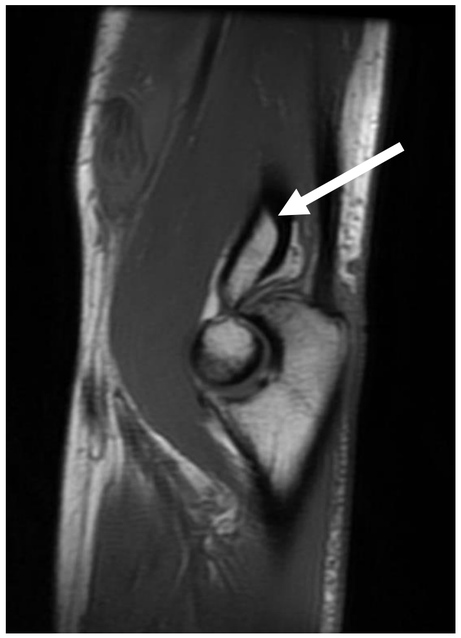
Constitutional: Well-developed, no acute distress
Psychiatric: Mood and affect normal.
HEENT: normocephalic, EOMI, neck supple
Cardiovascular: Normal rate and intact distal pulses.
Pulmonary/Chest: Effort normal. No respiratory distress.

RUE focused exam
Inspection: Notable pop-eye deformity. No swelling or ecchymosis
Palpation: There is tenderness at the right distal anterior bicep region and anterior fossa**.** No tenderness at the shoulder, olecranon, or epicondyles.
Range of motion: Shoulder and elbow with full range of motion.
Strength: Right elbow 3/5 in flexion, supination, and pronation; 5/5 in extension. Right shoulder 5/5 throughout.
Neurovascular: Normal sensation. Normal reflexes. normal distal pulses/cap refill.
Special tests: Negative Tinel's on elbow. Positive hook test.

OBJECTIVES



IMAGING: On ultrasound, there is a large defect in the distal biceps with tenderness on palpation. Both stumps separated by hypoechoic fluid collection measuring 2.25 cm x 3.7 cm. There is no bony avulsion on the radial head attachment site. On MRI, there is a complete distal biceps tendon rupture with tendinous retraction 9.5 cm proximal to the radial tuberosity, surrounding peritendinous hematoma proximally, and distal bicipitoradial bursitis.



DIFFERENTIAL

- Distal Biceps Tendonitis
- Distal Biceps Tendon Rupture
- Median Mononeuritis
- Bicipitoradial Bursitis
- Lateral Antebrachial Cutaneous Nerve Entrapment

TX COURSE

Diagnosis: Left distal biceps rupture
Outcome: Approximately 3 weeks after initial presentation, the patient underwent a distal biceps tendon rupture repair with orthopedic surgery and placed in immobilizing splint post operatively. He was followed up in orthopedic clinic 2 weeks postoperatively for an incision check. He was counseled to be non-weight bearing for 6 weeks.

Follow-up: Once pain-free range of motion is achieved, the patient was instructed to begin a gradual, step-by-step return to activity and referred to physical therapy to improve strength and in flexibility of the biceps.

AUTHOR’S COMMENTS

Exam findings can include a "reverse Popeye" deformity in 45% of cases. Palpation usually reveals tenderness at the distal biceps tendon. Elbow motion is preserved. Pain present and strength is diminished with forearm supination and resisted elbow flexion. Special tests to evaluate the distal biceps tendon (DBT) for tear include the biceps squeeze and hook tests. Ultrasound is specific, sensitive, and superior compared to MRI for diagnosis. All patients with DBT rupture should be referred for expedited surgical referral given the potentially significant functional limitations associated with injury.

REFERENCES

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